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Integrating maize-based feed and dairy value chains for structural transformation in Cameroon’s agro-industrial clusters

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Abstract

Cameroon’s ambitions for food security and import substitution, as outlined in the National Development Strategy 2020–2030, rely heavily on the competitiveness of the maize and dairy sectors. Despite an annual maize production exceeding two million tons and a significant cattle population, both value chains underperform and remain poorly integrated; an issue which the territorial cluster model aimed to address. This study investigated the structural constraints hindering this integration and examined how existing policy frameworks could bridge the gap between the two value chains.

The analysis employed a value chain approach involving field visits in the West (maize-based feed hub) and Adamawa (dairy hub), and interviewed about 100 stakeholders, including farmers, feed producers, dairy value chain actors, relevant ministry officials and sector experts. A review was also made on production and importation data, feed milling capacity utilisation, actor relationships, infrastructure gaps, governance systems, and territorial agro-industrial cluster performance as an integration mechanism.

Findings reveal that maize and dairy are structurally intertwined yet policy-fragmented and managed by separate ministries, resulting in weak institutional integration across the two value chains. Feed costs account for up to 70 % of livestock production costs; yet inefficiencies in the maize sector, such as post-harvest losses, aflatoxin risks, and seasonal price volatility, undermine the reliability of feed supply, constraining effective integration with dairy production. Consequently, feed milling and dairy processing plants operate far below capacity, reflecting weak transmission between the two systems. Despite spatial complementarities, weak logistics and the absence of contractual aggregation limit physical and commercial linkages, preventing the emergence of a functional feed-dairy corridor. Although the territorial cluster model aims to address these gaps, its success is limited by incomplete financing and weak private-sector anchoring.

To escape the current challenges, Cameroon must transition from fragmented interventions to well-managed, integrated, cluster-based systems. Priorities include investing in shared infrastructure (drying facilities, quality labs, and cold-chain logistics) and strengthening governance through functional farmer organisations. Policy should focus on improving the integration between these value chains to improve the circular bio-economy, reduce dairy imports and foster inclusive rural growth.

Keywords: Agri-food policy, circular bio-economy, food security, post-harvest losses, structural constraints, value chain integration

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